Any dry cleaning facility that installs a "new" machine

must install a dry-to-dry machine with a refrigerated condenser. In addition, facilities that purchase large quantities of perc (over 1,800 gallons annually) are required to use a carbon adsorber with a refrigerated condenser on the new dry-to-dry machine.

"New" transfer machines that use perc cannot be installed. New carbon adsorbers cannot be used without a refrigerated condenser for required perc vapor recovery.

How does the new Federal EPA regulation relate to State or local requirements?

Existing State or local requirements that may have affected you prior to the new EPA regulation continue to apply. The new EPA regulation is the minimum emission control that is required nationally. Some State and local agencies do require stricter controls.

What are the reporting and compliance requirements?

All perc dry cleaners must comply with the pollution prevention requirements in the EPA regulation now.

By June 18, 1994, each facility must submit a report to EPA stating how it is complying with the EPA pollution prevention requirements. Forms are available to help with this report. All new facilities must comply upon start-up with all requirements and submit a compliance report within 30 days after start-up. This compliance report is submitted to EPA one time; it is not required annually. However, a report must be submitted to EPA whenever any facility undergoes a change, such as an increase in the amount of perc purchased annually or the purchase of new equipment.

Perc vapor recovery systems (refrigerated condensers and carbon adsorbers) are not required until September 22, 1996, for "existing" machines; however, all "new" machines must be equipped with these systems upon start-up.

Rrefrigerated condensers must cool the perc vapor in the machine down to 45 degrees Fahrenheit or less at the end of the dry cleaning cycle. Any carbon adsorbers must not release more than 100 parts per million of perc out of the stack. The carbon adsorber test is performed with a colorimetric (chemical) test kit, available through dry cleaning trade associations and vendors. The carbon adsorber test is not required for "existing" machines until September 22, 1996. However, if a facility chooses to submit a compliance report to EPA **before** 1996, it is required to start testing immediately. For facilities that use carbon adsorbers for control requirement compliance, the test is required weekly.

How much will it cost?

The cost of compliance will vary from dry cleaner to dry cleaner. Some pollution prevention or "good housekeeping" practices, such as repairing leaks, could be relatively inexpensive or even result in a savings by recovering perc that otherwise would have been lost.

The average price to purchase a refrigerated condenser is \$6,000 to \$8,000. Installation may add \$1,000 to \$2,000 to this cost. The estimated average yearly cost for operating a refrigerated condenser is \$460.

Depending on the total volume of clothes cleaned using a refrigerated condenser, the annual costs could be less expensive or could result in a cost savings by recovering perc that otherwise would have been lost.

Whom can you contact for additional information?

The EPA is divided into ten geographic regions. Please call the Regional Office where your State or territory resides for reporting forms and the address where forms should be sent.

Region	States	Region
1	CT, ME, MA, NH, RI, & VT	(617) 565-2734
2	NJ, Puerto Rico, & Virgin Islands NY	(212) 264-6819 (212) 264-6679
3	DE, MD, PA, VA, WV, & District of Columbia	(215) 597-3237
4	AL, FL, GA, KY, MS, NC, SC, & TN	(404) 347-2864
5	IL & IN	(312) 353-8651
	MI & WI	(312) 886-5031
	MN & OH	(312) 886-7017
6	AR, LA, NM, OK, & TX	(214) 655-7547
7	IA, KS, MI, & NE	(913) 551-7922
8	CO, MT, ND, SD, UT, & WY	(303) 293-1886
9	AZ, CA, HI, NV, American Samoa, & Guam	(415) 744-125
10	AK, ID, WA, and OR	(206) 553-1949

For more information, you can also contact your State or local air pollution control agency, your local, regional or national dry cleaning trade association, or your State small business assistance program.

United States
Environmental Protection
Agency

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Office of Air Quality Planning & Standards (MD-10)

Controlling Emissions From Dry Cleaners



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EPA's New Regulation Controlling Emissions from Dry Cleaners



In September 1993, the U.S. **Environmental Protection Agency** (EPA) issued national regulations to control air emissions of per-

chloroethylene from dry cleaners. The regulation appeared in the September 22, 1993, edition of the Federal Register [volume 58, beginning on page 49354]. The regulation affects all dry cleaners who use perchloroethylene - about 30,000 dry cleaners nationally.

The Clean Air Act (CAA), reauthorized by Congress in 1990, directs EPA to regulate emissions of 189 toxic chemicals, including perchloroethylene, commonly referred to as "perc." from a wide range of industrial sources. EPA is regulating emissions of perc from dry cleaners to meet the requirements of the CAA. Congress included perc on its list of CAA toxic chemicals to be regulated because it is suspected to cause cancer in humans and is considered toxic, and causes dizziness, nausea, and headaches.

Dry cleaners are the largest source of perc emissions in the are often released in close proximity to large numbers of people. EPA estimates that full compliance with its new regulation will result in a reduction of 7,300 tons of perc into the air annually.

The regulation affects all dry cleaners who use perc in both transfer and dry-to-dry machines. How you are affected depends on the type of machinery you use and the amount of perc you purchase each year.

The regulation requires all perc dry cleaners, regardless of size. to undertake the following "pollution prevention" steps:

 Inspect all dry cleaning equipment at least every other week for leaks that are obvious from sight, smell, or touch. For example, leaks are where drops of perc are visible on the outside of a machine or where a stream of air can be felt

every week. All leaks must be

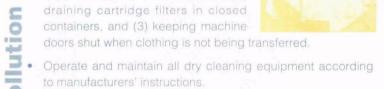
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Follow good housekeeping practices. which include (1) keeping all perc and wastes containing perc in covered containers with no leaks. (2) containers, and (3) keeping machine

doors shut when clothing is not being transferred.



to manufacturers' instructions.

• Keep a log of the amount of perc purchased for the past 12 months. (At any time, know how much perc was purchased

December 9, 1991, is an important date under the regulation. In determining how a facility may be affected, it is important to know when your perc dry cleaning machines were installed. DRY CLEANING MACHINES INSTALLED BEFORE **DECEMBER 9, 1991, ARE CONSIDERED "EXISTING:" ANY BRAND NEW MACHINES INSTALLED ON OR AFTER** DECEMBER 9, 1991, ARE CONSIDERED "NEW." Please note that any dry cleaning machine or facility that was originally installed before December 9, 1991, and that has undergone either a transfer of ownership or a change of location is considered "existing." If a machine or facility has changed ownership, it is important that records are maintained to prove that installation occurred before December 9, 1991.

All "new" dry cleaning machines must be equipped with at least a refrigerated condenser used as a perc vapor recovery system. At larger dry cleaners, "existing" dry cleaning machines must be equipped with a refrigerated condenser (or a carbon adsorber if it was in place before September 22, 1993).

Facilities that exceed certain levels for perc purchases are considered "large" dry cleaners and must install perc vapor recovery systems on each "existing" machine.

TYPE OF MACHINE	PURCHASE AMOUNTS OF PERC*	CONTROL
Transfer machines only	200 or more gallons/year	Refrigerated condensers or existing carbon adsorber**
Dry-to-dry machines only	140 or more gallons/year	Same as above
Combination of dry-to-dry and transfer machines	140 or more gallons/year	Same as above

- Usage is based on the total amount of perc purchased at a facility location for all perc machines for the previous twelve months.
- Adsorbers in place before September 22, 1993, can be used.

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"Small" dry cleaners purchase perc in amounts below the levels in the following table. "Small" dry cleaners do not need to install perc vapor recovery systems on "existing" machines.

TYPE OF MACHINE	PURCHASE AMOUNTS OF PERC*	
Transfer machines only	Less than 200 gallons/year	
Dry-to-dry machines only	Less than 140 gallons/year	
Dry-to-dry and transfer machines	Less than 140 gallons/year	

Usage is based on the total amount of perc purchased at a facility location for all perc machines for the previous twelve months.

A dry cleaning facility that (1) has a transfer machine and (2) purchases over 1,800 gallons per year of perc must install a room enclosure around each transfer machine and vent the room enclosure to a carbon adsorber. Room enclosures cannot be vented to refrigerated condensers.